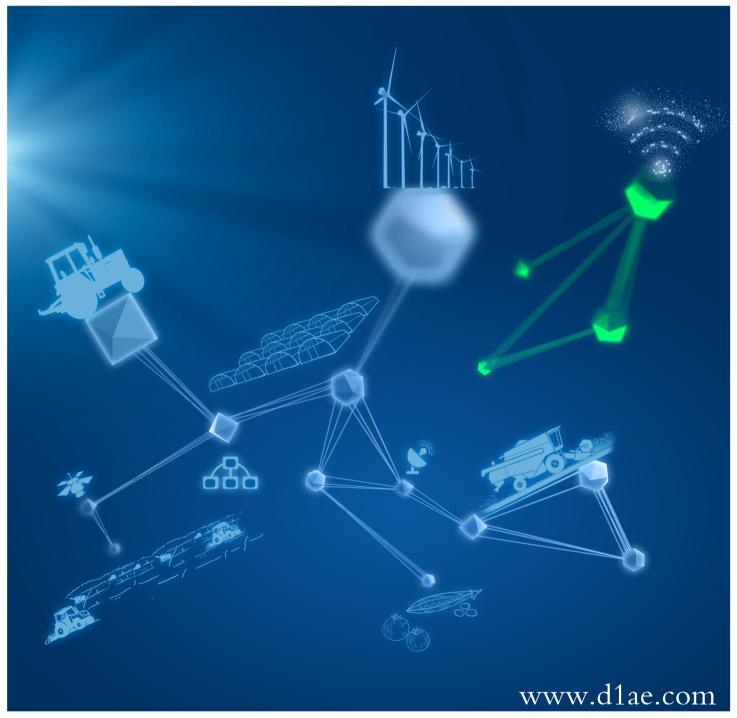


5 2023

AGRICULTURAL ENGINEERING

第13卷 Vol.13







NONGYE GONGCHENG



2023年 第13卷 第5期 (总第117期)

目 次

装备与机械化

不同收获方式对燕麦收获质量的影响 …………………………………………刘 芸 郑德聪 卢 琦 刘钊珲 (5) 山西省玉米收获机质量现状及建议 · · · · · · 王 成 (10) 基层农机手经营面临困境及解决对策——基于安徽省阜阳市颍州区农机手的调查 ………………… 章春忠 (17) 信息与电气化 基于 PIE-Engine 的甘蔗榨季砍收进度监测 ……………… 潘桂颖 戴芊芊 于晓薇 林君仪 王 琨 (21) 支撑智库研究的信息资源保障体系建设 …………… 邸小康 张 辉 秦晓婧 程 旭 王彩虹 唐 朝 (27) 叶面施硒下荞麦冠层叶片氮含量遥感估测研究 马 纬 武志明 余科松 马晓光 (34) 基于 FCN 网格定位和特征融合的水培生菜幼苗状态检测方法 ········ 李 晔 杨伟樱 刘 月 兰 天 李振波 (39) 生物环境与能源 生物质颗粒燃料炊事炉具设计与试验 ………………… 张 霞 宋添添 孙高凯 苏盼杰 黄峻伟 (69) 基于氮元素循环利用的鱼粪生化处理工艺优化 ……………… 张 娟 韦秀丽 张 凯 毕 茹 曹建斌 (75) 食品科学与工程 蔬菜农药残留快速检测假阳性关键因子及控制对策 ……… 张 瑜 周钦方 王丽芳 王 雯 曹丽芬 王 斌 (80) 水土工程 双代号时标网络计划技术在滴灌工程施工管理中的应用 ………………………………………… 杜克余 魏辅婷 张文豪 (87) 基于改进多目标决策模型的大桥水库灌区渠系自适应规划方法 ………………………………………… 张 瑜 (91)

设计制造与理论研究

基于 EDEM 的不同品种花生种子填充特性仿真与试验				
	几阳 王	剑文	李秀杰	(97)
4J-1 型自走式中药材捡拾机设计与试验 ····· 薛	平 芷	i 杰	郄占明	(105)
秸秆精细粉碎双排定刀还田机设计	韦光 杨	楠	李 卓	(109)
科研与教学				
基于 PatSnap 平台的秸秆机械化打捆技术专利分析 ·····			相姝楠	(114)
农机液压系统检修课程实践教学改革			汪振凤	(119)
卓越体系下食品类校企协同实践教育模式探索与应用——以沈阳农业大学食品专业为例				
	慧 李	<u>निर्</u> ग	李 斌	(123)
涉农工程类研究生创新复合型人才培养 · · · · · · · · · · · · · · · · · · 刘振宇 张志勇 刘顼	其芳 郭	小凤	李林葳	(127)
农学与生物技术				
植物抗寒基因及 ICE-CBF-COR 信号转导研究进展 ······田-	一粟 姜	明	张启宇	(131)
农业经济管理				
粮食种植农户节肥意愿及影响因素——基于河北省种植农户的调查数据				
	星璨 郝	換换	张新仕	(138)
山东省区域农业现代化发展空间探索张广	智 刘	嘉豪	孙志亮	(145)
乡村振兴背景下陕西省扶风县山地花椒种植与旅游开发 张	萍 蹇	 姣	邢 蕾	(152)
"一带一路"倡议背景下陕西省农产品产业发展对策 ······			杨晓玲	(156)

AGRICULTURAL ENGINEERING

Vol. 13 No.5 2023

Contents

Equipment and Mechanization Effect of Different Harvesting Methods on Oat Harvesting QualityLIU Yun, ZHENG Decong, LU Qi, LIU Zhaohui (5) Current Situation and Suggestions on Quality of Corn Harvesters in Shanxi Province ······ WANG Cheng (10) Planting System Design and Agricultural Machinery Configuration Method for International Large-scale Agricultural Difficulties Faced by Grassroots Agricultural Machinery Operators and Their Solutions: Investigation on Agricultural Machinery Operator in Yingzhou District, Fuyang City, Anhui Province ····· ZHANG Chunzhong (17) **Information and Electrification** Monitoring of Sugarcane Harvesting Progress Based on PIE-Engine During Milling Season PAN Guiying, DAI Qianqian, YU Xiaowei, LIN Junyi, WANG Kun (21) Construction of Information Resource Assurance System to Support Think Tank Research DI Xiaokang, ZHANG Hui, QIN Xiaojing, CHENG Xu, WANG Caihong, TANG Chao (27) Remote Sensing Estimation of Buckwheat Leaf Nitrogen Content under Foliar Selenium Application Detection Method of Hydroponic Lettuce Seedlings Status Based on FCN Grid Location and Feature Fusion LI Ye, YANG Weiying, LIU Yue, LAN Tian, LI Zhenbo (39) Experiment on Tomato Production Control Technology in Solar Greenhouses Based on Internet of Things Application of Remote Sensing Technology in Identification of Agricultural Plastic Greenhouse LI Huizhen (52) **Biological Environment and Energy** Research Progress of Hydrothermal Carbonization TechnologyZENG Xiangrong, LIAO Chuanhua, WANG Mingxing, LIU Shengmin (56) Design and Experiment of Biomass Pellet Fuel Cooking StoveZHANG Xia, SONG Tiantian, SUN Gaokai, SU Panjie, HUANG Junwei (69) Optimization of Biochemical Treatment Process for Fish Feces Based on Nitrogen RecyclingZHANG Juan, WEI Xiuli, ZHANG Kai, BI Ru, CAO Jianbin (75) **Food Science and Engineering** Key Factors and Control Measures of False Positives in Rapid Detection of Pesticide Residues in Vegetables ZHANG Yu, ZHOU Qinfang, WANG Lifang, WANG Wen, CAO Lifen, WANG Bin (80) Water-soil Engineering Application of Double-code Time-scale Network Planning Technology in Drip Irrigation Project Adaptive Planning Method for Canal System in Daqiao Reservoir Irrigation Area Based on Improved Multi-objective Decision-making Model · · · · · ZHANG Yu (91)

Design, Manufacture and Theoretical Research

Simulation and Experiment of Seed Filling Characteristics of Different Peanut Varieties Based on EDEM	
QIAN Kai, LIU Long, LIU Daoqi, SUN Qiantao, WANG Dongwei, CHEN Kaiyang,	
WANG Jianwen, LI Xiujie	(97)
Design and Experiment of 4J-1 Self-propelled Picking Machine for Chinese Traditional Medicinal Materials	
	(105)
Design on Double Row Fixed Blade Returning Machine for Fine Straw Crushing	
LIU Weiguang, YANG Nan, LI Zhuo	(109)
Scientific Research and Teaching	
Patent Analysis of Straw Mechanization Baling Technology Based on PatSnap Blatform · · · · XIANG Shunan	(114)
Practical Teaching Reform on Course of Agricultural Machinery Hydraulic System Maintenance	
WANG Zhenfeng	(119)
Exploration and Application of Practical Education Mode of School and Enterprise Cooperation of Food Major	
under Excellence System: Taking Food Major of Shenyang Agricultural University as an Example	
JIAO Xinyao, LI Dongnan, WANG Yuehua, TAN Hui, LI Li, LI Bin	(123)
Cultivation of Innovative and Compound Talents for Agricultural Engineering Graduate Students	
LIU Zhenyu, ZHANG Zhiyong, LIU Qifang, GUO Xiaofeng, LI Linwei	(127)
Agronomy and Biotechnology	
Progress on Cold Resistance Genes and ICE-CBF-COR Signaling in Plants	
TIAN Yisu, JIANG Ming, ZHANG Qiyu	(131)
Management of Agricultural Economy	
Willingness and Influencing Factors of Grain Farmers to Save Fertilizer: Based on Survey Data of Planting Farmers	
in Hebei Province ···· HAN Xuan, SONG Jian, YANG Xiuli, WANG Guirong, LI Min, ZHANG Xingcan,	
HAO Huanhuan, ZHANG Xinshi	(138)
Exploration on Development Space of Regional Agricultural Modernization in Shandong Province	
	(145)
Planting and Tourism Development of Mountain Prickly Ash in Fufeng County of Shaanxi Province under	
Background of Rural Revitalization · · · · · ZHANG Ping, QIAN Jiao, XING Lei	(152)
Development Countermeasures of Agricultural Product Industry in Shaanxi Province under Background	
of "the Belt and Road" Initiative	(156)



投稿、审稿、排版、发布全流程数字化出版

为打造百年品牌期刊而努力!

- ★ 2014年,入选国家新闻出版广电总局认定的学术期刊
- ★ 2016—2022年,连续7年被评为中国科技核心期刊 (CSTPCD)
- ★ 2020年,被评为RCCSE中国准核心学术期刊
- ★ 2020年,被评为中国农林核心期刊
- ★ 2020年,荣获中国机械工业集团有限公司优秀科技期刊三等奖
- ★ 2022年,荣获中国机械工业集团有限公司优秀科技期刊二等奖
- ★ 中国学术期刊网络出版总库(CNKI数据库) 收录
- ★ 万方数据库收录、超星期刊域出版平台收录
- ★ 中文科技期刊数据库(维普资讯)收录















在线投稿: www.d1ae.com





地址:北京市朝阳区北沙滩1号院综合楼(100083)

电话: 010-64883625/64882380